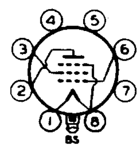
ILA4
POWER AMPLIFIER PENTODE

Filament	Coated	
Voltage	1.4	d-c volts
Current	0.05	amp.
Maximum Overall Length		2-25/32"
Maximum Seated Height		2-1/4"
Maximum Diameter		1-3/16"
Bulb		T-9
Base		Lock-in 8-Pin
Pin 1 - Filament +		Pin 5 - No Connection
Pin 2 - Plate		Pin 6 - Grid
Pin 3 - Screen		Pin 7 - No Connection
Pin 4 - No Connection		Pin 8 - Filament -
Mounting Position		Any

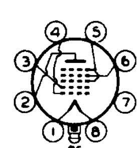


BOTTOM VIEW ($5AD_1$)

For curve and additional data, refer to Type 1A5GT/1A5G. The 1LA4 and the 1A5GT/1A5G are identical electrically.

ILA6
PENTAGRID CONVERTER

Filament	Coated	
Voltage	1.4	d-c volts
Current	0.05	amp.
Direct Interelectrode Capacitances:°		
Grid #4 to Plate		0.4 μμf
Grid #4 to Grid #2		0.3 μμf
Grid #4 to Grid #1		0.15 μμf
Grid #1 to Grid #2		0.6 μμf
Grid #4 to All Other Electrodes (R-F Input)		7.7 μμf
Grid #2 to All Other Electrodes Except Grid #1 (Osc. Output)		3.3 μμf
Grid #1 to All Other Electrodes Except Grid #2 (Osc. Input)		2.9 μμf
Plate to All Other Electrodes (Mixer Output)		8.0 μμf
Maximum Overall Length		2-25/32"
Maximum Seated Height		2-1/4"
Maximum Diameter		1-3/16"
Bulb		T-9
Base		Lock-in 8-Pin
Pin 1 - Filament +		Pin 5 - Grids #3 & #5
Pin 2 - Plate		Pin 6 - Grid #4
Pin 3 - Grid #2		Pin 7 - No Connection
Pin 4 - Grid #1		Pin 8 - Filament -
Mounting Position		Any



BOTTOM VIEW (7AK)

° With close-fitting shield connected to negative filament terminal.

(continued on next page)

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1LA6

1LA6
PENTAGRID CONVERTER

(continued from preceding page)

CONVERTER SERVICE

Plate Voltage	90 max.	volts
Screen (Grids #3 & #5) Voltage▲	55 max.	volts
Screen Supply Voltage	90 max.	volts
Anode-Grid (Grid #2) Voltage	90 max.	volts
Total Zero-Sig. Cathode Current	3 max.	ma.
Typical Operation and Characteristics:		
Plate	90	volts
Screen	45	volts
Anode-Grid	90	volts
Control-Grid (Grid #4)▲▲	0	volts
Oscillator-Grid (Grid #1) Resistor	200000	ohms
Plate Res.	0.75 approx.	ohms
Conversion Transcond.	250	μmhos
Conversion Transcond. with Grid #4 Bias of -3 volts	10 approx.	μmhos
Plate Cur.	0.55	ma.
Screen Cur.	0.6	ma.
Anode-Grid Cur.	1.2	ma.
Oscillator-Grid Cur.	0.035	ma.
Total Cathode Cur.	2.4	ma.

NOTE: The transconductance of the oscillator portion (not oscillating) is approximately 550 μmhos, and the anode grid current 2.2 ma. under the following conditions: plate volts, 90; screen volts, 45; control-grid volts, 0; anode-grid volts, 90; and oscillator-grid volts, 0.

▲ Obtained preferably by using a properly by-passed 45000 to 75000-ohm voltage-dropping resistor in series with a 90-volt supply.

▲▲ A resistance of at least 1.0 megohm should be in the grid return to negative filament pin.

A Typical Pentagrid Circuit is shown under Type 1A6.

May 1, 1941 TENTATIVE DATA

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